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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,581	03/17/2004	Erwin Cocnraad Murk	903-101	3875
23869 7590 09/10/2007 HOFFMANN & BARON, LLP 6900 JERICHO TURNPIKE SYOSSET, NY 11791			EXAMINER THOMPSON, CAMIE S	
			ART UNIT	PAPER NUMBER
			1774	
			MAIL DATE	DELIVERY MODE
			09/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/802,581	Applicant(s) MURK, ERWIN COENRAAD	
	Examiner Camie S. Thompson	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS; WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed June 19, 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Applicant's amendment and accompanying remarks filed June 19, 2007 are acknowledged.
2. Examiner regrets the typographical error for the von Bonin reference in the previous Office Action. The correct U.S. Patent Number for the von Bonin reference is 4,831,062.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over von Bonin, U.S. Patent Number 4,831,062² in view of von Bonin, U.S. Patent Number 4,992,481 and in further view of Waller, U.S. Patent Number 5,214,200.
von Bonin ('062²) discloses an intumescent material and building elements that contain cement, fillers, sawdust and plasticizer (see column 3, line 52-column 4, line 7). It is disclosed in reference '061² that glass fibers are incorporated into the matrix comprising cementitious material containing cement, fillers, sawdust and plasticizer (see column 6, lines 44-58). Column 5, lines 50-53 of the '061² reference discloses that the fibers are parallel.

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²
von Bonin ('06²) does not specifically disclose the type of cementitious material. Von Bonin ('481) discloses fire retardant elements used in building panels (see column 10, lines 19-40). Von Bonin ('481) discloses that the cement can be aluminous cement (see column 7, lines 1-4). Aluminous cement has fire retarding properties. Therefore, it would have been obvious to one of ordinary skill in the art to use aluminous cement in the von Bonin ('06²) reference in order to have improved fire resistant properties.

Neither von Bonin reference discloses the type of plasticizer used. Waller discloses plasticizers that comprise carboxylic ethers (see abstract). The use of a carboxylic acid ether in a plasticizer increases fire resistance properties. Therefore, it would have been obvious to one of ordinary skill in the art to have a carboxylic ether plasticizer in order to enhance the fire retarding properties of the matrix material.

5. Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over von Bonin, U.S. Patent Number 4,831,06² in view of von Bonin, U.S. Patent Number 4,992,481 and in further view of Waller, U.S. Patent Number 5,214,200 and in further view EP 1001000.

²
von Bonin ('06²) discloses an intumescent material and building elements that contain cement, fillers, sawdust and plasticizer (see column 3, line 52-column 4, line 7). It is disclosed in reference '06² that glass fibers are incorporated into the matrix comprising cementitious material containing cement, fillers, sawdust and plasticizer (see column 6, lines 44-58). Column 5, lines 50-53 of the '06² reference discloses that the fibers are parallel.

²
von Bonin ('06²) does not specifically disclose the type of cementitious material. Von Bonin ('481) discloses fire retardant elements used in building panels (see column 10, lines 19-40).

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Von Bonin ('481) discloses that the cement can be aluminous cement (see column 7, lines 1-4).

Aluminous cement has fire retarding properties. Therefore, it would have been obvious to one of ordinary skill in the art to use aluminous cement in the von Bonin ('06²) reference in order to have improved fire resistant properties.

Neither von Bonin reference discloses the type of plasticizer used. Waller discloses plasticizers that comprise carboxylic ethers (see abstract). The use of a carboxylic acid ether in a plasticizer increases fire resistance properties. Therefore, it would have been obvious to one of ordinary skill in the art to have a carboxylic ether plasticizer in order to enhance the fire retarding properties of the matrix material.

The European reference discloses the process of mixing several materials together and casting and drying to form a fire retardant product (see page 2, lines 50-58, page 3, lines 2-22 and page 4, lines 36-38). The amount plasticizer is not disclosed in the reference. However, this is an optimizable feature. Discovery of optimum values of a result effective variable involves only routine skill in the art *in re Boesch*, 617, F.2d 272, 205 (CCPA 1980). The amount of plasticizer affects fire retarding properties. Therefore, it would have been obvious to one of ordinary skill in the art to have the plasticizer in the amount of 3-5% in order to have enhanced fire retarding properties for the matrix material.

Response to Arguments

6. Applicant's arguments filed June 19, 2007 have been fully considered but they are not persuasive. Applicant argues that the von Bonin reference '062 does not teach the use of aluminous cement, a carboxylic ether polymer based plasticizer and a fiber layer. von Bonin '062 teaches building elements that contain cement, fillers, sawdust, plasticizer and glass fibers that are incorporated into a matrix comprising cement fillers, sawdust and plasticizer. It is disclosed in column 6, lines 53-58 that the building elements are reinforced fibers in the coating material (matrix), which comprises the sawdust, filler, cement and plasticizer. von Bonin '062 also discloses that the fibers are glass fibers and the components are used in multilayer structures. Although von Bonin does not disclose that the plasticizer is a carboxylic ether based polymer or the cement is aluminous-based, reference '062 does disclose the use of a plasticizer and cement in the matrix. Applicant also argues that the von Bonin '062 reference does not disclose the use of alkali resistant glass fibers. von Bonin '062 discloses the use of glass fibers, which is generic and would encompass alkali resistant glass fibers. von Bonin '062 is not an anticipatory rejection. von Bonin '481 is analogous art with von Bonin '062 and discloses fire retardant elements used in building materials. Von Bonin '481 was brought in to show that aluminous cement is used in an intumescent composition to improve fire retardant properties. von Bonin '062 discloses the use of a plasticizer, which was generic. Waller was brought in to show carboxylic ether based polymer plasticizer, which is specific and is encompassed by the generic plasticizer of the von Bonin '062 reference. Applicant argues that the slurry of the Magni reference may be cast into a mould. Magni discloses that its slurry is used in preparing reinforced concrete structures, which are moulds or performs. Applicant also argues that Magni

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fails to teach or suggest the use of a plasticizer. Although Magni does not suggest a plasticizer in its slurry, Magni is analogous art to von Bonin '062 and '481 and comprises a mixture for a building element. None of the references (von Bonin '062, '481, Waller and Magni) disclose the amount of the plasticizer. However, the amount of the plasticizer used in the matrix composition is an optimizable feature. The rejections are maintained.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano, can be reached at (571) 272-1398. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Milton I. Cano', with a stylized flourish at the end.

MILTON I. CANO
SUPERVISORY PATENT EXAMINER